

WALUNARRA, BUNGARRA MALI AND THE GANGALIDDA AT OLD DOOMADGEE:—Near Old Doomadgee (16°57'S, 138°49'E), the country of the Gangalidda people, in the monsoon tropics, there are two species of freshwater turtles: walunarra, the 'mud turtle', is a species of *Chelodina* (possibly *C. rugosa*, possibly an undescribed species) and bungarra mali, the 'stinking turtle', is *Chelodina novaeguineae*.

In the area, there is no permanent freshwater although lagoons provide plentiful surface water for much of the year. At varying times during the dry season, which usually begins in June-July, the lagoons become rock-hard clay beds. The rate of drying depends on size, shape, depth, substrate, vegetation, previous rains and temperatures. Within a radius of 30km of Old Doomadgee, there are some ten lagoons. Both walunarra and bungarra mali occur in all of these waters and they have been collected as a prized food source by the Gangalidda for as long as is remembered. As the waters of the lagoons recede during 'the dry', walunarra digs into the mud to aestivate and bungarra mali migrates to other longer-lasting lagoons.

At an unnamed lagoon 3km SW of Old Doomadgee, three of us (JC, PC, KM) recently accompanied Major Walden, a senior Gangalidda, while he collected a specimen of walunarra from its aestivation site. The site was well concealed both by the low, thick, sharp foliage and by the tangled root system of *Melaleuca acacioides*, which fringes many of the lagoons in the area. To the untrained eye, surface evidence of an aestivating turtle is difficult to find. The mound of mud above the site is some 60-70mm high. It is a whorl and resembles those made by freshwater crabs. However, they are much less common and they lack the central hole (diameter 20-30mm) of those made by crabs. As well, at the base of the turtle's mud-whorl is a small air hole (diameter about 3-5mm), used by the turtle for breathing.

As Major Walden dug into the rock-hard mud below the whorl, the digging disturbed the aestivating turtle and it

emitted a sudden 'whoosh' of air; this is characteristic behaviour. The turtle was located, head down, eyes-closed (they appeared 'sealed' against desiccation) at a depth, from rear of shell to ground surface, of approximately 120mm. The turtle was not vertically aligned. Rather, it rested on the diagonal at an angle of about 30°. A second specimen was located in the same way, under very similar conditions between the surface roots of a large *Melaleuca leucodendra* close to the lagoon edge.

When we visited the area (June, 1990) water levels were still high in the lagoons, although they were drying up quite rapidly. In the previous weeks, bungarra mali had been found, apparently moving to new, temporary lagoons—something that has been observed in the area for many years (Alice Ned, pers. comm.) at roughly the same time each year.

Both species of turtles are utilised as food by the Gangalidda. Major Walden and others have supplied us with details of the method of cooking walunarra. (We have no data on whether the same procedure is followed for bungarra mali). The turtle is killed by ringing its neck. The neck is then cut to expose its wind pipe into which air is blown. (In early times, the live turtle was held so air could be blown into its mouth and nose). The wind pipe is then tied to keep the air in so a 'cushion' exists to separate internal organs from the shell to prevent their becoming stuck to the shell during cooking. If air is not blown into the turtle, the carapace and plastron are cracked to ensure successful cooking.

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